

### REMARKS

Claims 1 and 3-7 are pending in the present application. By this Amendment, previously presented claims 3-4 and 7 are amended; and claim 8 is cancelled. Applicant respectfully requests reconsideration of the present claims in view of the foregoing amendment and the following remarks.

Entry of the above amendment is proper under 37 C.F.R. §1.116 (a) in that the above Amendment (1) places the claims in condition for allowance; (2) places the claims in better condition for consideration on appeal, if necessary; (3) does not raise any new issues; and (4) does not add new claims without canceling a corresponding number of claims. For the reasons given above, entry of the above amendment under 37 C.F.R. §1.116 is respectfully requested.

#### I. Formal Matters:

##### Claim Rejections Under 35 U.S.C. §112

Claims 3-8 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicant respectfully traverses this rejection.

Claims 3-4 have been amended as shown above to clearly recite that the adhesive sheet of claim 1 further includes a second adhesive sheet applied to the first protective layer of the first flexible substrate via a second adhesive layer of the second adhesive sheet. Claim 7 has also been amended as shown above to provide antecedent basis for the term "the first protective layer."

Applicant respectfully submits that the amendments to claims 3-4 and 7 are solely for the purpose of addressing the "indefiniteness" rejection under 35 U.S.C. §112, second paragraph. The amendments to claims 3-4 and 7 have not been made due to any art of record.

Applicant respectfully submits that amended claims 3-4 and 7 meet the definiteness requirements under 35 U.S.C. §112, second paragraph. Accordingly, withdrawal of this rejection is respectfully requested.

II. Prior Art Rejections:

Claim Rejections Under 35 U.S.C. §103(a)

Claims 1 and 3-8 are rejected under 35 U.S.C. §103(a) as being unpatentable over European Patent Application Publication No. 0467570 A2 to Hsu et al. (hereinafter, "EPA'570") in view of Japanese Patent Application Publication No. 08-337771 to Haruhiko et al. (hereinafter, "JP'771"). This rejection is respectfully traversed.

Applicant's claimed invention, as embodied in independent claim 1, is directed to an adhesive sheet comprising, *inter alia*, a first flexible substrate, a first adhesive layer provided on the back surface of the first flexible substrate, and a first protective layer provided on the front surface of the first flexible substrate, wherein the first protective layer is a thermoplastic resin layer containing (a) a fluorine copolymer, wherein the fluorine copolymer contains a vinylidene fluoride unit, (b) a non-fluorine polymer, and (c) a hydrophilic agent, wherein the hydrophilic agent is a compound represented by the following general formula:



wherein Z represents an organic group, X represents -C=O (carbonyl group) or -SO<sub>2</sub> (sulfonyl group), and Rf represents an organic group, which may contain an oxygen atom, in which all or a portion of hydrogen atoms are substituted with fluorine atom(s).

As discussed by Applicant in paper no. 5 (Applicant's Amendment and Response filed on August 22, 2003) and acknowledged by Examiner Zirker in paper no. 4 (the May 22, 2003 Office Action), the teaching of EPA'570 fails to teach or suggest an adhesive sheet comprising a first protective layer containing a hydrophilic agent as recited in independent claim 1 (see, paper no. 4, page 3, lines 8-13). In order to cure the above-noted deficiencies in the teaching of EPA'570, Examiner Zirker relies on the teaching of JP'771 directed to specific hydrophilic agents suitable for use in paints.

The teaching of JP'771 is directed to specific hydrophilic agents for use in paints, wherein the paints contain thermosettable and/or crosslinkable materials, crosslinking agents, and/or curing agents. Applicant acknowledges that the hydrophilic agents disclosed in JP'771 are suitable for use in the present invention, and are identical to those recited in Applicant's

independent claim 1. In fact, the disclosure of JP'771 is specifically referred to in the present application on page 2, lines 5-17, page 3, lines 4-19, and page 4, lines 17-22 of Applicant's specification.

Examiner Zirker maintains that one of ordinary skill in the art, given the teaching of EPA'570, would have (1) realized that the teaching of EPA'570 had one or more shortcomings related to the inability of the disclosed coated substrates to resist contamination by hydrophilic dirt and lipophilic dirt; (2) sought out and discovered the teaching of JP'771 directed to specific hydrophilic agents for use in paint technology; and (3) incorporated the hydrophilic agents disclosed in the teaching of JP'771 into the coating layer of the disclosed substrates in the teaching of EPA'570. Applicant disagrees.

Applicant respectfully submits that one of ordinary skill in the art, given the teaching of EPA'570, would not have been motivated to modify the disclosed coated substrates in the teaching of EPA'570 as suggested by Examiner Zirker. There is no suggestion in the teaching of EPA'570 that the disclosed coated substrates have any shortcomings related to resisting contamination by dirt. In fact, the teaching of EPA'570 suggests to one of ordinary skill in the art just the opposite. As disclosed in the teaching of EPA'570, the coatings applied to the substrates in the teaching of EPA'570 "are surprisingly **very resistant to dirt**, stains, and other weather elements" (column 1, lines 48-55). (Emphasis added.) See also, the disclosure in the teaching of EPA'570 at the following locations: the Abstract ("the coated flexible substrates are particularly resistant to dirt and stain accumulation"); column 1, line 56 to column 2, line 2; column 5, lines 34-36; and column 6, lines 5-7.

The coated substrates in the teaching of EPA'570 "are surprisingly very resistant to dirt, stains, and other weather elements" due to the presence of a weather and dirt resistant coating comprising (i) a copolymer of vinylidene fluoride and a copolymerizable fluoromonomer, and (ii) a predominant methyl methacrylate resin. The disclosed weather and dirt resistant coating may contain other additives, such as UV absorbers, but does not contain any hydrophilic agents, and does not require any hydrophilic agents in order to be surprisingly very resistant to dirt, stains, and other weather elements. Clearly, there is no suggestion in the teaching

of EPA'570 for the need to incorporate any hydrophilic agents into the disclosed weather and dirt resistant coating.

Further, Applicant respectfully submits that one of ordinary skill in the art, given the teaching of EPA'570, would not have sought out the teaching of JP'771 as suggested by Examiner Zirker, and then incorporated the hydrophilic agents disclosed in the teaching of JP'771 into the coating layer of the disclosed substrates in the teaching of EPA'570. As discussed above, the teaching of EPA'570 does not provide suggestion or motivation to one of ordinary skill in the art to (i) seek out the teaching of JP'771, or (ii) modify the disclosed weather and dirt resistant coated substrates in the teaching of EPA'570.

As discussed above, the teaching of JP'771 is directed to thermosettable, crosslinkable, and/or curable paints that contain specific hydrophilic agents. Why would one of ordinary skill in the art seek out the teaching of JP'771 directed to crosslinkable paints given the teaching of EPA'570 directed to weather and dirt resistant coated substrates? There is no suggestion in the teaching of JP'771 to incorporate the disclosed hydrophilic agents into a coating layer that already possesses weather and dirt resistance such as the coating layers disclosed in the teaching of EPA'570. Further, there is no suggestion in the teaching of JP'771 to incorporate the disclosed hydrophilic agents into a coating layer that is free from thermosettable materials, crosslinkable materials, or curing agents such as the coating layers disclosed in the teaching of EPA'570. Moreover, there is no suggestion in the teaching of JP'771 to incorporate the disclosed hydrophilic agents into a weather and dirt resistant coating comprising (i) a copolymer of vinylidene fluoride and a copolymerizable fluoromonomer, and (ii) a predominant methyl methacrylate resin such as the coating layers disclosed in the teaching of EPA'570. The teaching of JP'771 only suggests the use of specific hydrophilic agents in thermosettable, crosslinkable, and/or curable paints.

It is not clear to Applicant why one of ordinary skill in the art, given the teaching of EPA'570 directed to weather and dirt resistant coated substrates having surprisingly good resistance to dirt, would (i) seek out the teaching of JP'771, which is directed to the art of thermosettable, crosslinkable, and/or curable paint compositions, and (ii) then incorporate a select component (i.e., a hydrophilic agent) from the disclosed thermosettable, crosslinkable,

and/or curable paint compositions in the teaching of JP'771 into the weather and dirt resistant coated substrates disclosed in the teaching of EPA'570. Applicant respectfully submits that the only motivation for seeking out the teaching of JP'771 and then modifying the teaching of EPA'570 as suggested by Examiner Zirker has been deemed from a review of Applicant's invention, not from what is being taught or suggested in the art of record.

For at least the reasons given above, Applicant respectfully submits that one of ordinary skill in the art would not have combined the teaching of EPA'570 with the teaching of JP'771 absent impermissible hindsight reasoning. Further, for at least the reasons given above, Applicant respectfully submits that the combination of the teaching of EPA'570 with the teaching of JP'771 is improper.

Applicant respectfully submits that a *prima facie* case of obviousness has not been made with regard to the rejection of independent claim 1 in view of the teaching of EPA'570 in combination with the teaching of JP'771. Since claims 3-7 depend from independent claim 1, and recite additional claim features, Applicant respectfully submits that a *prima facie* case of obviousness has not been made with regard to the rejection of claims 3-7 in view of the teaching of EPA'570 in combination with the teaching of JP'771. Accordingly, Applicant respectfully requests withdrawal of this rejection.

It should be further noted regarding dependent claims 3-4 that the combined teaching of EPA'570 and JP'771, even if proper (and Applicant maintains that the proposed combination is improper), fails to teach or suggest Applicant's claimed invention embodied in dependent claims 3-4. Both of the teachings of EPA'570 and JP'771 fail to teach or suggest (i) an adhesive sheet comprising a second adhesive layer as recited in dependent claim 3; (ii) an adhesive sheet comprising a second adhesive layer containing a coupling agent as recited in dependent claim 3; and (iii) an adhesive sheet comprising two separate protective layers, each of which contain (a) a fluorine copolymer, wherein the fluorine copolymer contains a vinylidene fluoride unit, (b) a non-fluorine polymer, and (c) a specific hydrophilic agent.

### III. Conclusion:

For at least the reasons given above, Applicant submits that claims 1 and 3-7

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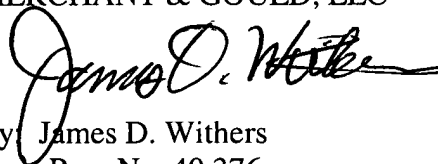
define patentable subject matter. Accordingly, Applicant respectfully requests allowance of these claims.

No additional fees are believed due; however, the Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 13-2725.

Should the Examiner believe that anything further is necessary to place the application in better condition for allowance, the Examiner is respectfully requested to contact Applicant's representative at the telephone number listed below.

Respectfully submitted,

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